



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,534	02/05/2004	Nripendra Nath Das	13DV-14080 (07783-0096)	5408
31450	7590	07/01/2004	EXAMINER	
MCNEES WALLACE & NURICK LLC 100 PINE STREET P.O. BOX 1166 HARRISBURG, PA 17108-5300			MCNEIL, JENNIFER C	
		ART UNIT	PAPER NUMBER	
		1775		

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/772,534	DAS ET AL. <i>[Signature]</i>
	Examiner	Art Unit
	Jennifer C McNeil	1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 February 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 18-21 and 28-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 18-21 and 28-43 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

A rejection based on double patenting of the 'same invention' type finds its support in the language of 35 U.S.C. 101 which states that 'whoever invents or discovers any new and useful process ... may obtain a patent therefor ...' (Emphasis added). Thus, the term 'same invention,' in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 18, 19, and 21 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 18, 19, and 21 of copending Application No. 10/685,637. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-21, and 28-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Rigney et al (US 6,283,714). Rigney teaches a gas turbine airfoil comprising a superalloy substrate, an external surface and an internal surface defined by internal passages. The internal surface is protected by forming a diffusion aluminide protective layer with substantially no aluminum deposited on the external surface during the step of forming. The external surface is protected by an overlay protective coating with substantially no aluminum or diffusion aluminide between the overlay protective coating and the external airfoil. This is considered to meet the limitations by providing an overlay on the external surface, and an aluminide on the internal surfaces. The limitation "any remaining portion" is considered

to be similar to an optional limitation. The external surface is considered to be entirely coated by the overlay, and as stated above, has no aluminum deposited during the aluminide coating formation on the internal surface. The process by which the layers are formed is not considered to structurally define over the prior art. “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”, (*In re Thorpe*, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Regarding claim 23, the first portion of the surface may be considered the external surface, and the second portion of the surface may be considered the internal surface. The substrate is considered to be low in aluminum content relative to the content after application of the aluminum coatings.

Regarding claim 28, the coating layer may be beta phase NiAl containing 30-60 at% Al. This is considered to overlap with the ranges of the instant claim.

Claims 29-31, and 33-38 are process limitations and are not considered to provide structural distinction over the prior art.

Regarding claims 19, 32, and 39-43, the article may be a turbine blade.

Claims 18-21, and 29-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Rigney et al (US 6,296,447). Rigney teaches a gas turbine component having an internal surface and an external surface. The internal and external surfaces may have overlay aluminum coatings and aluminide diffusion coatings. The overlay coatings are not applied at the same time as the diffusion aluminide coatings, and

portions that are not to be coated may be masked. Therefore, when the internal surface is being coated, the external surface is not affected, and vice versa. The overlay may be a MCrAlY coating.

The limitation "any remaining portion" is considered to be similar to an optional limitation. The external surface is considered to be entirely coated by the overlay, and as stated above, has no aluminum deposited during the aluminide coating formation on the internal surface. The process by which the layers are formed is not considered to structurally define over the prior art. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.", (*In re Thorpe*, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Regarding claim 23, the first portion of the surface may be considered the external surface, and the second portion of the surface may be considered the internal surface. The substrate is considered to be low in aluminum content relative to the content after application of the aluminum coatings.

Claims 29-31, and 33-38 are process limitations and are not considered to provide structural distinction over the prior art.

Regarding claims 19, 32, and 39-43, the article may be a turbine blade.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer C McNeil whose telephone number is 571-272-1540. The examiner can normally be reached on 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer McNeil  
Primary Examiner